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The  
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*Has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.*

*Therefore, this*

United States Patent

*Grants to the person(s) having title to this patent the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States of America or importing the invention into the United States of America for the term set forth below, subject to the payment of maintenance fees as provided by law.*

*If this application was filed prior to June 8, 1995, the term of this patent is the longer of seventeen years from the date of grant of this patent or twenty years from the earliest effective U.S. filing date of the application, subject to any statutory extension.*

*If this application was filed on or after June 8, 1995, the term of this patent is twenty years from the U.S. filing date, subject to any statutory extension. If the application contains a specific reference to an earlier filed application or applications under 35 U.S.C. 120, 121 or 365(c), the term of the patent is twenty years from the date on which the earliest application was filed, subject to any statutory extension.*

A handwritten signature in black ink, appearing to read "J. Todd Johnson".

*Acting Commissioner of Patents and Trademarks*

*Attest*  
Marjorie V. Turner



US005938087A

## United States Patent [19]

Randall

[11] Patent Number: 5,938,087  
[45] Date of Patent: Aug. 17, 1999

## [54] SPURT MINIMIZING DISPENSING STRUCTURE

[75] Inventor: Jeffrey T. Randall, Oconomowoc, Wis.

[73] Assignee: AptarGroup, Inc., Crystal Lake, Ill.

[21] Appl. No.: 08/877,759

[22] Filed: Jun. 17, 1997

[51] Int. Cl.<sup>6</sup> B65D 47/40[52] U.S. Cl. 222/547; 222/556; 222/568;  
222/571[58] Field of Search 222/547. 556.  
222/568. 571

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## [57] ABSTRACT

A spurt-resistant spout for a dispensing structure includes (1) an internal tubular portion having a through bore connecting a dispensing orifice of the spout with the interior of the container, and (2) a surrounding wall portion surrounding the tubular portion. The tubular portion and the surrounding wall portion are sized and located so that little or no fluid is retained in and across the spout bore so as to prevent, or minimize, obstruction of the bore.

26 Claims, 2 Drawing Sheets

